

**Rejection under 35 USC §102**

Claims 1 and 2 stand rejected under 35 USC §102(b) as being anticipated by Laine et al. (Laine). Applicants respectfully disagree.

Claim 1 recites a device having a device region with an active component. A cap is mounted on the substrate to create a package which seals the active component. The cap creates a cavity over the device region. Spacer particles are fixed to the active component to prevent the cap from contacting it.

On the other hand, Laine discloses an electronic package having a chip bonded to a thermally conductive member. Mounting a cap over the substrate to form a package to seal the active component on the device region of the substrate and wherein the cap creates a cavity over the device region is nowhere taught or suggested by Laine. The Examiner suggests that the conductive member, solder balls, chip, and printed circuit board are analogous to the substrate, spacer particles, active component, and cap, respectively, of claim 1. Applicants respectfully disagree. However, even assuming that this is true, Applicants submit that fixing spacer particles on the active component to prevent the cap from contacting it is still nowhere taught or suggested. The absence of spacer particles on the chip allows the cap to contact the chip when pressure is applied to the circuit board, contrary to what is recited in claim 1. As for claim 2, it has been amended to recite that the active component comprises one or more OLED cells. Laine fails to teach or suggest the use of an active component comprising one or more OLED cells. Applicants submit that claims 1 and 2 are patentable over Laine. Therefore, Applicants respectfully request withdrawal of the rejection based on 35 USC §102(b).

**Rejection under 35 USC §103**

Claims 8-11 stand rejected under 35 USC §103(a) as being unpatentable over Laine in view of Chen et al. (Chen). Applicants respectfully disagree.

As previously described, Laine fails to teach or suggest a device with a package having a cavity over an active component on the device region of the substrate by mounting a cap on a substrate and spacer particles fixed on the active component to prevent the cap from contacting it, as recited in claim 1 and from which claims 8-11 are directly or indirectly dependent. Chen fails to compensate for the deficiencies of Laine since it only teaches coating solder balls with an adhesive. Applicants therefore submit that claims 8-11 are patentable over Laine and Chen,

alone or in combination. Therefore, Applicants respectfully request withdrawal of the rejection based on 35 USC §103(a).

**Allowed Claims**

Claim 56 has been allowed by the Examiner. Since newly added claims 57-68 are all either directly or indirectly dependent on claim 56, Applicants submit that these claims are also patentable over the cited art.

**Cited Art of Record Not Relied Upon**

Applicants submit that the remaining art of record not relied on, alone or in combination, also fails to teach providing spacers on an active component formed on a device region of a substrate to prevent a cap mounted on the substrate which creates a cavity over the active component from contacting the active component.

**Conclusion**

Attached hereto is a marked-up version of the changes made in the specification and claims by the present amendment. The attached page is captioned "**Version with markings to show changes made**". In view of the foregoing, Applicants believe that all claims now pending in this application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Should the Examiner believe that a telephone conference would expedite prosecution of this application, please telephone the undersigned attorney at his number set out below.

Dated: October 31, 2002

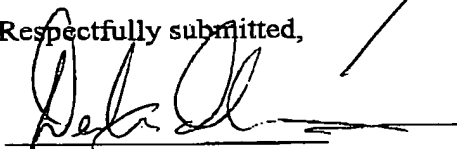
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Horizon IP Pte Ltd  
166 Kallang Way  
6<sup>th</sup> Floor  
Singapore 349249  
Tel: (65) 9836 9908

TECHNOLOGY CENTER 2800

Respectfully submitted,

  
Dexter Chin  
Reg. No.: 38,842

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Specification:**

The paragraph beginning in line 3 of page 1 has been amended as follows:

This application ~~claims the priority is a continuation-in-part~~ of international patent application titled "Encapsulation of Organic LED Devices", PCT Application Number: PCT/SG99/00143 (attorney docket number 99E02809SG).

**In the Claims:**

Claims 17-23 and 27-55 have been cancelled, claims 1, 2, 14, and 24 have been amended, and new claims 57-68 have been added.

Claims 1, 2, 14 and 24 have been amended as follows:

1. (amended) A device comprising:  
a substrate with a device region defined thereon;  
an active component on a surface of the substrate in the device region;  
a cap mounted on the substrate to form a package for encapsulating the device,  
the cap creates a cavity over the device region to seal the active component; and  
spacer particles fixed to the active component ~~a surface of the device region~~,  
the spacer particles prevent the cap from contacting the active component ~~to support the cap~~.
2. (amended) The device of claim 1 wherein the active component ~~device region~~ comprises one or more OLED cells.
14. (amended) The device of claim 12 wherein the spacer particles comprise a spherical or non-spherical shape or a combination thereof.
24. (amended) The device of claim 13 wherein the spacer particles comprise a spherical or non-spherical shape or a combination thereof.